Digitized by the Internet Archive
in 2008 with funding from
Microsoft Corporation

http://www.archive.org/details/n10pediatricsnyl02newyuoft

P
Med
P

VOL. 2. No. 10. NOVEMBER 16th, 1896. 8s. A YEAR.

PEDIATRICS

OWNER
DILLON BROWN, M.D.
NEW YORK

EDITOR
GEORGE CARPENTER, M.D.
LONDON

LIBRARY
MAR 16 1949
UNIVERSITY OF CALIFORNIA

DEVOTED TO THE DISEASES OF CHILDREN

PUBLISHED SEMI-MONTHLY
WITH ILLUSTRATIONS

SINDELAR

HARRISON & SONS, 45, ST. MARTIN'S LANE, LONDON, W.C.
Van Publishing Company, 1432, Broadway, New York.
Eyre & Spottiswoode, Sydney, Australia.
J. C. Juta & Co., Cape Town, Cape of Good Hope.

Published on the 1st and 15th of the Month, 8 Shillings a Year.

PEDIATRICS

An Illustrated Semi-Monthly Devoted to the

Diseases of Infants and Children.

OWNER:
DILLON BROWN, M. D.
NEW YORK.

EDITOR:
GEORGE CARPENTER, M. D.
LONDON.

EDITORIAL STAFF:

MEDICINE.

Angel Money, M. D., Sydney, Australia, *Formerly Assistant Physician to the University College Hospital, and to the Great Ormond Street Hospital for Sick Children, London.*

A. Jacobi, M. D., New York, *Clinical Professor of Diseases of Children in Columbia College.*

J. Lewis Smith, M. D., New York, *Emeritus Professor of Diseases of Children in Bellevue Hospital Medical College; Visiting Physician to the Foundling Hospital and the Infant Asylum, etc.*

Frederick Forchheimer, M. D., Cincinnati, *Ex-President of the American Pediatric Society, and Professor of Diseases of Children in the Medical College of Ohio.*

Daniel Colquhoun, M. D., Dunedin, New Zealand, *Examiner in Medicine at the University.*

SURGERY.

Henry R. Wharton, M. D., Philadelphia, *Surgeon to the Children's and the Presbyterian Hospitals.*

Frederic S. Eve, F. R. C. S., Eng., London, *Surgeon to the London Hospital and to the Evelina Hospital for Children.*

Lambert H. Ormsby, M. D., F. R. C. S. I., Dublin, *Surgeon Meath Hospital and National Children's Hospital.*

C. P. B. Clubbe, M. R. C. S., Sydney, Australia, *Senior Surgeon to the Hospital for Sick Children.*

D. Leith Napier, M. D., Adelaide, New South Wales, *Senior Surgeon and Gynæcologist to the Adelaide General Hospital.*

Albert Martin, M. D., Wellington, New Zealand, *Surgeon to the Wellington General Hospital.*

ORTHOPEDICS.

Henry Ling Taylor, M. D., New York, *Assistant to the Hospital for Ruptured and Crippled.*

Frederic R. Fisher, F. R. C. S., Eng., London, *Senior Surgeon to the National Orthopedic Hospital, and late Surgeon to the Victoria Hospital for Children.*

THERAPEUTICS.

Prof. Adolf Baginsky, Berlin, *Director of the Kaiser and Kaiserin Friedrich Wilhelm Children's Hospital.*

Reynold W. Wilcox, M. D., New York, *Professor of Therapeutics in the Post-Graduate Medical School and Physician to St. Mark's Hospital.*

John Thomson, M. D., Edinburgh, *Extra Physician Royal Hospital for Sick Children, and Lecturer on Diseases of Children, Edinburgh School of Medicine.*

Dawson Williams, M. D., London, *Physician to the East London Hospital for Children.*

TERATOLOGY.

Egbert H. Grandin, M. D., New York, *Ex-President of the County Medical Society; Consulting Obstetric Surgeon to the Maternity Hospital, and Gynecologist to the French Hospital.*

J. W. Ballantyne, M. D., Edinburgh, *Lecturer on the Diseases of Infancy and Childhood, Minto House; and Physician for Diseases of Children, Cowgate Dispensary.*

GASTRO-ENTERIC DISEASES.

Morris Manges, M. D., New York, *Physician to Mount Sinai Hospital and Editor of "Ewald's Diseases of the Stomach."*

J. Boas, M. D., Berlin, *Editor of the "Archiv fur Verdauungs-krankheiten."*

TROPICAL DISEASES.

Surgeon Lieutenant-Colonel I.M.S., Charles H. Joubert, M. B., F. R. C. S., Calcutta, India, *Professor of Midwifery and Obstetric Physician, Medical College of Calcutta.*

Surgeon-Major H. P. Birch, Quetta, India.

GENITO-URINARY DISEASES.

Frederic Russell Sturgis, M. D., New York, *Visiting Surgeon to the City Hospital.*

G. A. Wright, M. B. Oxon., F. R. C. S., Manchester, *Senior Assistant Surgeon to the Manchester Royal Infirmary, and Surgeon to the Hospital for Children, Pendlebury.*

Fancourt Barnes, M. D., London. *Consulting Physician to the British Lying-in Hospital.*

NEUROLOGY.

Joseph Collins, M. D., New York, *Physician to the Hospital for Nervous Diseases.*

James Taylor, M. D., London, *Senior Assistant Physician to the National Hospital for the Paralyzed, and Physician to the North Eastern Hospital for Children.*

MATERIA MEDICA.

Henry H. Rusby, M. D., New York, *Professor of Materia Medica and Botany in the College of Pharmacy.*

LARYNGOLOGY AND OTOLOGY.

Wm. C. Glasgow, M. D., St. Louis, *Professor of Laryngology in the Missouri Medical College.*

Arthur H. Cheatle, F. R. C. S., London, *Surgeon to the Royal Ear Hospital and Clinical Assistant to Aural Department of King's College Hospital.*

Max Thorner, M. D., Cincinnati, *Professor of Laryngology and Otology, Cincinnati College of Medicine and Surgery; and Aurist and Laryngologist to the Cincinnati Hospital.*

Peter McBride, M. D., Edinburgh, *Aural Surgeon and Laryngologist, Royal Infirmary; and Lecturer on the Diseases of the Ear and Throat, Edinburgh School of Medicine.*

DERMATOLOGY.

James Nevins Hyde, M. D., Chicago, *Professor of Skin and Venereal Diseases in Rush Medical College.*

Leslie Phillips, M. D., Birmingham, England, *Surgeon Birmingham and Midland Skin and Lock Hospital.*

OPHTHALMOLOGY.

Myles Standish, M. D., Boston, *Ophthalmic Surgeon to Carney Hospital and to Massachusetts Charity Eye and Ear Infirmary.*

William Arthur Brailey, M. D., London, *Ophthalmic Surgeon to Evelina Hospital for Children and Guy's Hospital.*

PATHOLOGY AND BACTERIOLOGY.

Henry Ashby, M. D., Manchester, England, *Physician Manchester General Hospital for Children; and Lecturer on Diseases of Children, Owens College.*

Alfred Lingard, M. D., India, *Muktesar, Kumaun Hills, N. W. P., Imperial Bacteriologist.*

PHYSIOLOGY.

C. S. Sherrington, M. D., F. R. S., Liverpool, England, *Holt Professor of Physiology, University College.*

PSYCHOLOGY.

T. Telford Smith, M. D., Lancaster, England, *Resident Medical Superintendent, Royal Albert Asylum.*

Lightner Witmer, Ph. D., Philadelphia, *Professor of Psychology in the University of Pennsylvania.*

SEND FOR SAMPLE COPY. Address PEDIATRICS, 45, St. Martin's Lane, London, W.C.

PEDIATRICS

Vol. II. NOVEMBER 15th, 1896. No. 10.

Original Articles.

ICHTHYOSIS IN CHILDREN.

A New Treatment by Thyroid Gland and Pilocarpine Nitrate.

By David Walsh, M.D., Edin.,

London.

Physician Western Skin Hospital, and Clinical Assistant Blackfriar's Skin Hospital.

THE curious condition of skin known as ichthyosis is of importance to those who have to do with the ailments of children. In ichthyosis proper we find dryness of the skin, which, in parts, especially on the trunk, elbows and knees, is rough, scaly, warty and thickened, of a greenish color, and has an undue tendency to become dirty. The milder and more common form of the malady known as xeroderma, shows a skin dry, slightly rough and scaly, and characterized by absence or marked diminution of sweat. In both forms the patient is sensitive to cold and is liable to eczema with formation of deep, painful rhagades or "chaps." As every one knows, the affection is nearly always congenital, although in most cases it is not observed until some time after birth. Indeed, in those rare instances where it is said to have come on in later life we may suspect that a mild ichthyotic state has probably escaped previous notice.

The etiology of this peculiar deformity is obscure. It is usually stated by authorities upon the subject to be hereditary, but that view is disputed by Unna* and is certainly not borne out by the four cases reported in this article. Both sexes are equally prone to attack. Pathologically there is an obvious error of cornification of the epidermic cells, or parakeratosis.

The chief points noted in microscopic sections are proliferation of the cells of all layers of the epidermis, elongated papillæ, and in the severer forms chronic changes in the deeper skin, with more or less atrophy of glands and lessening of the fat of the corium. However, little is known as to the ultimate cause of this extensive disturbance of the cutaneous envelope. Leloir† thinks it is usually a tropho-neurosis. Unna‡ inclines to the opinion that true ichthyosis may be an infectious hyperkeratosis. The writer has imagined that in some instances this interesting error of development may be a reversion to the reptilian or some other ancestral type of skin.

Nor has the treatment of this disease hitherto rested on anything like a satisfactory basis. Certain facts about it are known as the result of clinical experience, but therapeutics cannot be said to have yet emerged from the empirical stage. One general observation is that the skin is less dry and rough in summer than in winter. Acting on this hint dermatologists have attempted to rouse into activity the skin and its glands. Accordingly we find that warm alkaline baths, turkish baths, and frictions insisted upon in all the text books as the best means of alleviating the discomfort of the patient. To this is added inunction, usually with simple unguents whereby the skin may be supplied, as it were, with that artificial sebum or "oil," which its own glands have failed to supply. Lastly, other physicians have used tar and other antiseptic applications. Until lately these simple remedies completed the special list at the command of the physician. Within the last few years, however, a powerful additional weapon has been placed in his hands in the shape of thyroid gland. Ever since the clinical acumen of Dr. Byrom Bramwell showed the profound influence exerted by that drug upon the nutrition of the skin, it has been used by dermatologists in every conceivable condition of that organ. Needless to say, in a great many instances it has proved worthless. Still, there are a few diseases, such as lupus vulgaris and ichthyosis, in which the gland appears to exercise a distinctly good effect. In the latter mentioned condition it has occurred to the writer that the action of the gland upon the skin might, as it were, be emphasized by the addition of a powerful skin stimulant, such as jaborandi, or preferably its alkaloid, pilocarpine. Accordingly Messrs. Burroughs and Wellcome made for him tabloids containing five

grains of the dried gland with 1-10 of a grain of pilocarpine nitrate. Experimental evidence indicates the use of the latter drug in ichthyosis, where the hindered activity of the sebiparous glands is a prominent feature. Thus it has been shown to have a peripheral action, for Fuchsinger (confirmed by Nawrocki) "found that section of the nerves of the cat's leg did not prevent the paws from sweating when jaborandi was exhibited." (Pfluger's Archiv, xv., 482.)

The combined drugs were administered in the four following congenital cases of simple but well marked cases of ichthyosis under the care of the writer. In no instance was a hereditary history obtainable.

1. Herbert H., *aet.* 4, came to the Western Skin Hospital, April 23, 1896, complaining of rough skin. Seven other children, one similarly affected. No hereditary history. The knees, elbows and loins were covered with greenish, warty epithelial thickening; to a less extent the abdomen; rest of body surface rough, dry and harsh; hands eczematous. To take thyroid gland, 5 grains daily. *May 1*, add tincture jaborandi, ♏ 10 thrice daily. *June 5*, Creolin baths ordered (first external treatment, patient had already considerably improved). *July 2*, he has pains in head, etc. To stop tabloids and rub in simple ointment. *Aug. 13*, tabloid thyroid gland, 5 grains with pilocarpine nitrate $\frac{1}{10}$ grain daily; continued to present date, when condition is thus reported; ichthyotic condition disappeared for some time; some xerodermatous roughness remained about legs, arms and face.

2. Margaret H., *aet.* 8 (sister of foregoing), was admitted *April 23, 1896.* History of rough skin since vaccination. Much the same physical condition as brother. Thyroid gland, 5 grains daily. *May 7*, tincture of jaborandi, ♏ 10, added thrice daily. *May 21*, two tabloids daily. *July 16*, "out of sorts," headache, etc., tabloids discontinued for a week. To take creolin baths. Very considerable improvement of skin since admission. *August 13*, compound tabloid (thyroid and pilocarpine) one daily, continued to date, without inconvenience. This patient began to improve within a few days of commencing the gland. In marked contrast to her brother, who took almost as many weeks to show an equal amount of improvement. Latterly, however, his progress was rapid.

3. Louisa M., *aet.* 5 years, was seen April 16, 1896. Five

other children, none of whom have rough skin. Mother suffered at one time from "bad hands." No hereditary history. Skin has been rough since birth. The lower trunk, elbows, and knees are rough, discolored and shagreen-like; rest of body surface dry, rough and harsh. Tabloid thyroid, 5 grains daily; to rub body with unguent boracis. In a month the skin showed considerable improvement. *April 30*, ♏ 5 of tincture of jaborandi added to the thyroid. *May 28*, jaborandi increased to ♏ 10. *July 19*, tabloid thyroid with pilocarpine, one daily, continued up to time of writing. After three months' treatment the mother of the child volunteered the statement that the child had never been so well since she could remember. At that date the face, legs and arms were still somewhat rough, but the rest of the body surface was soft and normal.

4. Annie S., *act.* 11, was seen Dec. 1, 1895. She was suffering from rough skin. She had been ten months under treatment and had improved, but latterly had left off and got worse again. She had been taking one tabloid, sometimes two, of thyroid gland for months previously to coming under observation. The back was harsh, rough and scaly; face rough; palms of hands dry, shiny and natural fissures emphasized (the characteristic ichthyotic palm). *Jan. 6*, skin softer. *Feb. 10*, two tabloids given. *Feb. 24*, tabloid reduced to one (headaches, etc.). *May 30*, three tabloids given with ♏ 10 of tincture jaborandi thrice daily. *June 13*, cheeks and hands feel soft and normal. *Aug. 17*, she has been at seaside, the cheeks are a little rough; one tabloid of thyroid with pilocarpine is given daily.

On *July 1*, 1896, this patient was shown along with the others at the Dermatological Society of Great Britain and Ireland. It was then reported: "Patient appears quite well except that the palms are shiny, although sweating freely, and the face has a tendency to get dirty."

Two of these cases had been under previous treatment, and both had been shown at the Dermatological Society. One treated with ordinary methods for seven months had not benefited materially. The second had been given thyroid gland and had improved considerable, but had relapsed. The latter patient showed much greater improvement under increased doses of the gland and still more so when combined

with jaborandi. After a few months' treatment, indeed, she herself advanced the statement that she had never been so well in her life before. The only signs of the ichthyotic condition remaining in her are the tendency of the face to get dirty and the shiny surface of the palms. This improvement has been maintained now for four or five months and has never been attained by any other plan of treatment. The point now to solve is whether thyroid gland, alone or in combination, will be able to effect the permanent cure of ichthyosis.

From the history of the cases given we may conclude that thyroid gland, on the whole, is well borne by children. In case No. 1, a boy of 4, the drug was stopped once, and that only after two months continuous administration. Case 4, a girl of eleven took fifteen grains daily for weeks without discomfort, although symptoms had before that been caused by ten grains.

In two cases (1 and 2) some improvement took place without local applications. However, the writer is inclined to regard the thyroid gland and pilocarpine as valuable aids to the treatment of ichthyosis rather than in the light of specific cures. A parallel instance may perhaps be found in the service rendered by tuberculin as an auxiliary therapeutic agent in dealing with lupus vulgaris. Probably the best means at our command in attacking the ichthyotic condition would be the use of hot tar or other baths, with simple inunctions and the internal administration of thyroid gland and pilocarpine.

The writer's main conclusions are :

1. That ichthyosis may be controlled, if not actually cured, by thyroid gland and jaborandi (or its active principle, pilocarpine).

2. That external routine treatment by means of baths and inunctions is a necessary adjunct.

3. That thyroid gland is well borne by children.

---

* Histopathology—Unna. English Translation, p. 323.

† XXth Century Practice of Medicine, Vol. v., p. 847.

‡ Histopathology—Unna. English Translation, p. 324.

PRACTICAL WORK IN PSYCHOLOGY.

By Lightner Witmer, Ph.D.,
University of Pennsylvania.

THE practical side of psychology deserves serious attention from professional psychologists. The practice of psychology may become as well defined a pursuit of a trained professional class as is the practice of medicine. The regular practitioners of psychology are the teachers. Unfortunately too many teachers turn to nostrums and traditional remedies, and have as yet too little appreciation of the value of training and of persistent study of the cases they are subjecting to treatment in the school-room. Unfortunately, also, specialists in pedagogy, notably the Herbatians, are too often enthusiasts advocating some particular course of treatment as a universal panacea. It is not surprising that the patient is often forgotten in the zealous devotion of the teacher to an ideal of education or to some specific method of instruction.

Irregular practitioners of psychology are also met with in the Christian Scientists and the advocates of Mind Cures in the many forms under which these are presented to the public. These advocates of mental treatment are not hopelessly in the wrong. In fact, they are often using methods that are employed by the physician, by the teacher and by every one who exerts an influence for good or evil upon his associates or upon the developing child. These irregular practitioners should be assailed, not for their method, but for their ignorance. They may do some good by methods already known to physicians and practised by them. The results that may be obtained in modifying mental and physical condition by appealing directly to the mind, ought to be studied without prejudice and preconception. These irregular practitioners ought to be met, not by attacking the effectiveness of mental treatment *in toto*, but by prosecution for practising medicine without a license, whenever their ignorant pretensions to cures of profound physical ailments lead to the infliction of irreparable injury upon their patients.

A practical psychology, undisturbed either by the splendid promises of pedagogical ideals or by the persistence of traditional or of "faddist" methods, should direct its inquiry to the determination of what the child was like when treatment be-

gan, what it is like when the treatment is completed, and what were the means employed. Credit for improved condition should be given to the course of treatment followed irrespective of the relation of such treatment to "systems" of pedagogy.

What assistance can a practical psychology offer in the study of the results of mental training?

First.—*The examination of the physical and mental condition of school children.* The normal, or supposedly normal child, should be studied in the years of school life by properly adapted physical measurements and mental tests, conducted so as to ascertain what the average child is and to show the advances made by him, from year to year, with increase in age and with the progress of school training. Such studies are already recognized as an important field of investigation in psychology, and are a part of every well directed department of child psychology. It is to be hoped that some day a careful examination of the mental and physical condition of every child will be an accepted feature of school work.

Second.—*The study of defective children.* These children are better subjects of investigation than normal children. As their mental and physical condition in many respects departs noticeably from the normal, it is generally apparent even to the casual observer and is susceptible of ready description and exact definition. The methods of instruction are simple and the difference in condition at the beginning and end of treatment is more marked than in normal children, so that the relation of result to method is more easily determined. I have found it of great service in my work in child psychology to visit, with my students, special institutions, such as the Pennsylvania Institution for the Feeble Minded, the Pennsylvania Institution for the Instruction of the Blind, the Pennsylvania Institution for the Deaf, and the House of Refuge. So far as possible the mental and physical condition of the children in these institutions is studied with particular reference to their special defects and general deficiencies, so as to make clear the psychological and pedagogical problems involved in their education.

Third.—*A psychological museum.* In connection with the department of psychology at the University of Pennsylvania, a collection is being formed of specimens of work done by defective children and of the instru-

ments and apparatus used in teaching them, together with records of the results of special investigation upon such children and upon normal children, exhibited in the form of tables and curves. This collection is the nucleus of a psychological museum, whose object will be to furnish material for examination by students of psychology and pedagogy as part of their regular work.

FOURTH.—*An experimental training school.* A very important adjunct to the department of Child Psychology would be a training school for classes of children who are below the average in possessing minor physical, mental or moral deficiencies, but who do not require, or whose parents would not submit to treatment in special institutions—children, for example, who have difficulty in hearing, in seeing, or in speech, who are backward in their studies, or who show defective powers of memory or attention, or disciplinary cases that require individual care to prevent mere nervousness or restlessness or an excess of primitive instincts from developing into moral obliquity. A conservative estimate places one per cent. of the school population within these designated classes, although as high an estimate as five per cent. has been given. The removal of these children from the ordinary schools would benefit them and their parents, would result in the improvement of the work of better endowed pupils, and be a great relief to teachers, whose energy is overtaxed in their treatment to the neglect of those children to whom society owes the best pedagogical training it can give. In addition to these classes there are many children who ought to have their school training supplemented by some individual treatment adapted to their specific needs. They may be constitutionally bad spellers, or backward pupils in one branch, though precocious in others, or children so self conscious or shy that their growth in mental capacity is seriously interfered with. Some attention given to such cases by pedagogical experts might cause many a difficulty to be overcome, and enable the child to take his place among his fellows instead of dropping out in the race. It would be the object of this school to make a careful study of each case, and upon the basis of a thorough examination to propose the treatment that each individual seems to require. A corps of capable and well-trained teachers, receiving on the average a much better compensation than their professional brethren, is required for its successful operation.

The careful study and treatment of these cases may be expected to increase our knowledge of the human mind, to test the value of pedagogical methods, and to benefit a numerous class of children and parents.

A school, such as I have here under consideration, will be the outcome of slow development. To a great extent it will be compelled to train its own teachers. Its beginnings, therefore, must be small; a building or even a school-room is not indispensable; in fact, many cases require home treatment. A number of special teachers with proper training and sufficient experience, working independently, but yet with the confidence and under the direction of specialists in nervous diseases or diseases of children, and with the co-operation of the department of psychology, will advance this line of work far beyond its experimental stages.

Miss Mary E. Marvin, whose statement of the methods used in developing the intellect of a feeble-minded child follows upon this sketch of the organization of practical work in psychology, is a teacher whose training and experience fit her for the satisfactory pedagogical treatment of cases of feeble-mindedness, or of minor intellectual deficiencies. She received a normal school training for the profession of teaching, and followed this with a training in methods of teaching oral speech to the deaf, acting for a time as the principal of a city school for the deaf. She has made a careful study of cases of feeble-mindedness, and backwardness in mental development, and has the enthusiasm and interest in her work that is needed to insure success. She has a few cases under her care already, and expects in the near future to rent a house where she can properly care for a few children needing the special training that she is able to give. Although her methods are her own, and in the treatment of each case she works under the direction of the specialist who has confided the case to her care—a relation that should always subsist between the special teacher and the medical specialist, if these difficult cases are to make the most satisfactory progress—she is yet in such co-operative association with the department of psychology at the University of Pennsylvania that her work will constitute the beginning of the experimental training school above outlined.

Methods Used in Developing the Intellect of a Feeble-Minded Child.—P. was born in a western city August 17,

1885. His parents are of Jewish descent and well educated, his father being one of the most prominent lawyers in the town. P. is said by the family physician to have been born normal, his mental defects being the result of severe convulsions while teething. Such special training as he had received previous to 1892 had proved unsuccessful. In September of that year I began my work with him. I found him a perfectly formed child—graceful, lovable and beautiful in appearance. The only words he had ever spoken were papa and mamma, and these in a very inarticulate way and without any idea of their meaning or proper application. Liquids or foods that could be swallowed without mastication had alone been given him on account of his seeming inability to chew. His sense of smell was most highly developed; by this sense he chose his food and recognized his friends. If by chance his hand came in contact with any object, it was hurriedly withdrawn and carried to his nostrils. Out of his own home he was uncontrollable, like one insane, upsetting whatever came within his reach. His first instinct when given anything was to destroy it; this he succeeded in doing if the strength of his fingers was sufficient, though he never employed other means of destruction as is common to defective children. Seldom could there be found any amusement great enough to retain his attention for even a second.

Holding his head between my hands in trying to fix his attention on my face, proved at first futile, as he would roll his eyes from side to side. However, I was finally successful. The only two things he seemed to care for were stringing buttons and playing with balls. If let alone he would sit on the floor by the hour thus amusing himself, but if his name were called, or he received the impression that he was wanted, he would spring to his feet and run anywhere and everywhere. He was remarkably adept in balancing things upon his head or hand. I have seen him take a tumbler of water, and placing it on the palm of his outstretched hand, drink the water without spilling a drop or touching the tumbler with the other hand. This was his most important, in fact, almost his only manifestation of motor ability. The performance of the balancing trick threw him into an almost maniacal frenzy, from which he emerged nervous, unstrung and mentally debilitated. Music alone, among sensory stimuli, appealed to him. He could hum most of the tunes he had ever heard.

The physician who had been attending him just previous to my being called in, advised training for the sake of the discipling he felt was necessary, but with no idea of improving the child's mental condition. The physician who examined him at my request gave me no encouragement, as he felt the home influence would be a detriment to any great improvement.

During the four years he was under my instruction, I was with him only three hours a day for five days of the week. My first task was to gain the child's affection, if he had any, and so I made his pleasures my pleasures. Sitting on the floor with him I would string buttons, roll balls, or sing. When he finally decided to accept with good grace the idea of sharing his pleasures with others, we began selecting buttons of a kind, thus taking the first step in the training of his powers of discrimination. After winning his affection I realized that but little would be accomplished unless he were taught to sit quietly and to look me in the eye when I was talking to him. After his attention could be fixed by the simple and direct method of holding his head, I had him sit in front of me when I would take both his hands in mine and fix my gaze on him until he was induced to look into my eyes. After a comparatively short time he realized that if he took the position I desired, his hands would be released; of his own accord then he would place his chair in front of me, seat himself, and putting his hands in mine, gaze up into my eyes. As his mind developed and he became quieter, this was his favorite attitude while being taught speech or music.

Speech was taught through music. Seated in my lap and holding his head between my hands, I would first sing a verse of a song, the tune of which he knew, then beginning again would sing one line over and over until, instead of humming the tune, he would try to imitate the motions of my mouth and the sounds. In a few months he had learned the words of "Yankee Doodle," and could sing them very distinctly.

During the first few months I allowed him to work only five minutes at a time, gradually lengthening the time until the fourth year, when he would work half an hour without showing signs of fatigue.

The development of the sense of touch was begun in our play with the balls. He learned to discriminate between the

hard ball and the soft, the wooden and the rubber, and by closing his eyes would tell the large and the small. As the sense of taste was developed, the inclination to smell his food grew less and by the second year had disappeared. By the fourth month of training he was not only allowed to have his meals with his parents, but was able to feed himself.

On the eighth of January he rather suddenly grasped the idea of applying proper names to persons. This awakening seemed like sunshine bursting through a storm-cloud. Although I had labored with him for many weeks to make him understand whom he should call mamma and papa, up to this day his comprehension had been very imperfect. This morning there was, what seemed to be, a sudden awakening.

At the close of the term, June 30, 1893, he had a vocabulary of over fifty words; could ask for everything he wanted in the way a baby first talks; recognized friends at some distance; had learned to ride a velocipede, and could spell one word, "boy." One very marked instance of the growth of the power of observation was the delight he experienced in driving, which heretofore had been objectionable to him. Force had been necessary to get him into the carriage and force now was needed to get him out. Instead of falling asleep he gradually began noticing objects along the way and calling his father's attention to them. After a vacation of a month, during July, we began work again, and, much to my surprise, I found he had made considerable gains during this period of rest. Among our playthings was a slate with sliding letters. He was very fond of making the letters whirl around the groove in which they rested. After allowing him this pleasure for a few days, I taught him to push them out of one groove into another, and to place one of a kind in a groove, naming the letter when he found it. The first letter he learned was "o," which was chosen on account of its resemblance to a ring. This we called "a bad boy," who had to be punished by being placed in the center groove. When he was able to select all the "bad boys" I taught him the name of the letter. Then followed "b," then "y," and by October 31st he was able to place them as to form the word "boy." He then took a dissected alphabet, and, selecting the three letters, spelled the word "boy" with them. After this he would recognize at a glance these letters and this word wherever he found them. During the winter the words "baby" and "bed" were mastered in the same way.

In the first two months of the second term the improvement was very marked. He surprised his father, when called to come to dinner, by answering "I can't now." He was busy putting away his blocks at the time. When reproved for some misdemeanor, he would say, "I won't do it again." It was at this time he discovered that when the bells rang at twelve o'clock, he was taken home, so at the first peal of the bells he would start for the door, saying: "It is time to go home." A few months later on being asked what he wanted to go home for, he replied, after a silence of a few seconds, "I want my dinner." With the development of the mind came physical weakness, and for a few weeks in mid-winter I feared the results. By perseverance he was taught to chew and thus compelled to take more nutritious food; the crisis was passed and from that time on he has been an exceptionally healthy child. By this time such questions as what was his name, how old, where he lived, names of the different members of his family, etc., he answered very readily. Two other accomplishments acquired during this term, were counting to one hundred and building houses with the blocks. On the closing day, June 29, 1894, he sang "Way down upon the Swanee River" with piano accompaniment.

The work of the third term was but a continuation of that previously done, with the introduction of written characters. As soon as I was convinced that the child understood the meaning or right use of a word, it was printed on one set of cards and written on another. As he had been taught to do with the dissected alphabet, he selected, from his total collection of words, those that were alike, arranging them in columns. In this way he learned to read at sight. The next step was the arrangement of these printed and written words so as to form sentences. The first sentence was "I am a boy." From this we went to simple books.

In beginning to teach him to write, weeks of perseverance were required before success crowned the efforts of the child to hold a piece of chalk firmly enough to draw a line from one point to another. When he had grasped the idea of tracing lines and figures, we proceeded to draw letters, the printed capital "A" being his first independent and successful attempt. In a few weeks more he was able to hold and use a pencil.

In August, 1895, he wrote his first word, "my."

By this time his powers of observation had so improved

that when a card, on which was a group of colored squares, not exceeding six, was passed quickly before his eyes, he could tell the number. In giving him pieces of candy, which he was fond of having, I taught him to add—not trying to go beyond the number five.

It was during this same month that colors were taken up. In this, as in most everything else, his toys were used, first balls, then blocks, and then beads. When he had learned to recognize one color, the next one given would be a decided contrast. Color naming came very easily to him. Every morning as the first exercise, he would tell me all the things he could do or see and I would write them down. From this he went to things he wanted to do, what others did, and what things were made of. Every day some new thought would divulge itself and would be welcomed with delight.

At first only three or four sentences were the reward of half an hour's work, but spurring him on by promising him the paper, he improved so rapidly that at the end of the term, June 29, he framed for me forty-three sentences in fifteen minutes.

The development of reason was plainly showing itself in the answers to questions given him, such as, "why do you wash your hands?" "Because they are dirty." "Why do you eat?" "Because I am hungry." "What do you do when it is dark?" "Light the gas." One of his greatest desires was to play games as his sister and brother did every evening. Among their games was Lotto, and this I chose in order that he might become familiar with the higher numbers. Beside this, the drill quickened the senses of hearing and sight and necessitated concentration and immediate action.

When I left him, June 30, 1896, he could write all his alphabet and several words—spelling and writing them as I dictated them; could add and subtract to six; could sing about twelve songs with piano accompaniment, and could read very nicely.

Among the difficulties encountered was teaching him to distinguish between heat and cold. Only by allowing him to find out from accidentally burning his finger when he put it in the gas or on a flat-iron, did he seem to understand the meaning of "hot." Holding a piece of ice or a snow-ball in the hand taught him the meaning of "cold." I am not convinced that he fully understands, as yet, bodily temperature. He seems to object seriously to being asked whether he is warm or cold.

Throughout my whole training of this child the single purpose was to make him natural in behavior, and as a part of this to observe, think and act for himself. The little traits and actions common to children I tried to bring out and cultivate in this defective child. The first appeal to him had been made through play, then through ambition to become "a great big man like papa," and then through his actual love for work.

A CASE OF OPIUM POISONING IN A CHILD THREE MONTHS OLD.

By W. Kaplan, M.D.,
New York.

THE following case illustrates the danger lurking in certain patent medicines. A few weeks ago I was hurriedly called to see a baby three months old, who was apparently dying from the effects of medicine administered by its mother. I found the baby in collapse. Its skin was cold, moist and covered with a clammy sweat; the pulse was feeble, hardly perceptible, and slow; the respirations were shallow and very slow, about ten to the minute, and the pupils were contracted to the size of a pin's head.

The mother said that half an hour previously she gave the child a dose of patent cough balsam for its cough and cold. The same medicine was given to an older child of four years, without ill effects, but the baby showed signs of distress immediately after taking it.

I diagnosed acute opium poisoning, and am glad to report that the child recovered after an emetic followed by stimulation with coffee, ammonia and artificial heat. I thought it noteworthy at the time how susceptible babies are to opium or its alkaloids, be the dose ever so small, considering that an older child of four years was not affected by a similar dose.

Observation teaches us how badly infants bear opium, and, as a rule, I never prescribe it in any form to a child under a year. I have often been called to attend babies in consequence of the reckless habit of mothers and nurses to drug their children with paregoric, but paregoric is usually accompanied by the direction of the doctor-druggist as to how many drops to give. A patent medicine, containing opium or its alkaloids, is a menace to the life of young children in the hands of ignorant people.

CONGENITAL SYPHILITIC DEAFNESS.

By Arthur H. Cheatle, F.R.C.S.,

London,

Surgeon to the Royal Ear Hospital and Senior Clinical Assistant, Aural Department, King's College Hospital.

THIS form of deafness is a labyrinthine lesion occurring usually between the ages of 14 and 20 years, the onset being insidious, as a rule, without vertigo, one ear being first affected, the other soon following suit, both gradually then becoming worse until complete deafness or greatly diminished hearing power is produced. Interstitial keratitis usually precedes the onset, the deafness being first noticed as the eye symptoms are clearing up, but this is not an invariable rule as, rarely, the ear precedes the eye trouble. The diagnosis is easy in a typical case, the eyes and teeth telling their own tale, the tuning-fork demonstrating the diminished tone conduction. If signs of present or old keratitis are not seen and the teeth are not characteristic, the fact of internal ear deafness insidiously coming on during this period of life without any ascertainable direct cause is more than suspicious.

As regards treatment, it is certain that unless begun in the early stage, none is of any avail; even when begun at the onset the result is extremely uncertain; arrest of the disease or slight improvement has been claimed for repeated blistering behind the ear and injection of pilocarpine subcutaneously, but it seems that when once the disease has started, treatment is too late to be of any avail. It must be preventive.

Lately I have been inquiring into the early life of patients suffering with the disease, with a view of ascertaining whether any prolonged anti-syphilitic treatment had been adopted in infancy; in not one of them have I been able to obtain a history of such treatment; the omission, I am convinced, is responsible not only for the ear, but for all the later manifestations of congenital syphilis. The responsibility seems to rest with those who have the care of congenital syphilitic infants. The question as to how long mercury should be given is an important one, and well worthy of investigation and discussion.

PRACTICAL NOTES.

To Draw the Cork of a Tablet Bottle.—In taking a look at the small bottles which are used to contain hypodermic tablets, and having demonstrated the impracticability of pulling the cork, especially when one is in a hurry, as one is likely to be when called upon to use the hypodermic syringe, Evans devised a method by which the cork is never broken, neither is the bottle broken in the attempt to remove a refractory cork that one has accidentally pushed in too far. As most corks are nearly the same in diameter throughout their entire length, he takes a common sewing needle and threads it double with No. 8 thread, having first tied two knots on the end. He forces the needle through the cork, beginning at the smaller end and piercing it lengthwise, then knots the thread again at its point of exit in such a manner that it cannot be drawn back. Then ties a knot about one-half inch from the last knot and clips off the thread. The cork can be drawn out at any time, even if it has been pushed in too far. The thread is always ready to pull upon, and is clean, neat, and very handy and inexpensive.—Evans, *Med. Rec.*, *1896*, *I. 517*.

The Thyroid Treatment in the Idiopathic Tetany of Children.—The *Presse Médicale* for July 11th contains an abstract of an article which was published in the *Riforma Medica*, Nos. 115 and 116, 1896, in which the writer states that Dr. Leone Maestro has experimented with this method of treatment in three cases of tetany. The thyroid gland was given raw or slightly cooked. Small doses were given in the beginning and gradually increased until the amount of thirty grains a day was reached. The results obtained were very satisfactory in the three cases, and the author felt justified, in spite of the limited number of observations on record, in forming the following conclusions: 1. The administration of the thyroid

gland is extremely useful in the treatment of idiopathic tetany in children, as it always diminishes the intensity and the frequency of the attacks, and shortens the duration of the disease; it also notably hastens the arrival of the latent period which precedes recovery. 2. The treatment is well tolerated by the children. 3. The organic changes, the digestive functions, and diuresis are not notably influenced by this mode of treatment. 4. The circulatory and respiratory functions are accomplished normally during this treatment. 5. In very young children, on account of their perfect tolerance, it is useful to administer the thyroid gland, raw or slightly cooked, internally. 6. With the exception of certain peculiar cases it is not necessary to suspend the treatment from time to time. 7. The daily dose is from thirty to sixty grains. 8. This treatment is not opposed to the symptomatic treatment, as it does not present any incompatibility with the methods ordinarily employed.—*N. Y. Med. Journ.*

Treatment of Erysipelas with Vaseline.—KOESTER (*Therapeutische Monatshefte*, June, 1896,) treats erysipelas in the following way: Vaseline is applied to the affected and surrounding parts twice a day; linen is laid over the vaseline, and a mask made if the part affected be the face. The dressing is held in place with gauze bandages. In other respects treatment is symptomatic—antifebrin or antipyrin for severe headache, and the same remedies, or quinine, when the temperature rises above 100°; ice bags to the head, laxatives, chloral, digitalis, and alcoholics, as indicated. The advantages of this method are: It can be used even upon the hairy scalp; smarting, burning and disagreeable odors are avoided; and the remedy is cheap.—*Therap. Gaz.*

An Ointment for Mumps.—According to the *Journal des Praticiens*, May 9, 1896, TRANCHET recommends the following:

℞ Ichthyol,
Iodide of lead, of each, 45 grains;
Chloride of ammonium, 30 grains;
Lard, 1 ounce.

This ointment is be applied to the swollen parts three times a day. In some instances vaselin may be used in place of the lard, and sometimes belladonna may be added with advantage.—*Therap. Gaz.*

Treatment of Burns.—Papazoglou (*Thèse de Paris*, 1896,), from practical experience, speaks favorably of picric acid as a local application in the treatment of burns. When the lesions are extensive the patient may be placed in a bath of picric acid; if they are limited, a solution of the acid may be applied, on antiseptic gauze, to the part. The following is the formula of the solution:

Powdered picric acid, 75 grains.
Alcohol, 2 ounces.
Boiled or distilled water, 1 quart.

The applications are employed for three or four days, strict antiseptic precautions being maintained. Even in severe burns two or three applications are said to be sufficient to effect a cure.—*The Practitioner.*

Clinical Thermometers should always be cleansed with antiseptic care after using. This is neglected by many physicians, even after use in the mouths of patients ill with infectious diseases.—*Med. Record.*

Injections of Serum in Cholera Infantum.—In fifteen cases of cholera infantum Reinach employed subcutaneous injections of cow's serum, in doses of from ten to twenty cubic centimeters. Four of the patients died; two had a concomitant broncho-pneumonia, and two a follicular gastro-enteritis of long standing. The effect of the injections manifested itself ordinarily in from six to eight hours after the administration of the serum, and from that time the temperature gradually rose, the extremities became warm, the cyanosis gave place to a rosy tint of the skin, and diarrhea was arrested. This condition generally continued on the following day, and recovery usually occurred after one injection only. In some cases, however, a second injection was necessary, in order to maintain the good results which were obtained by the first one. Besides these injections, rice water was given. The author states that, from a nutritive point of view, twenty cubic centimeters of assimilable serum are equivalent to five ounces of cow's milk, or to an ounce and a half of the mother's milk.—*N. Y. Med. Journal.*

Editorial.

THE TREATMENT AND TRAINING OF "BACKWARD" CHILDREN.

IN PEDIATRICS of October 15th, one of our editorial staff, Prof. Lightner Witmer, of Philadelphia, pointed out in considerable detail the necessity for the specialist in diseases of children, the neurologist and the pedagogue, to co-operate in a more enlightened treatment and education of that large class of children who present abnormalities of mental development, varying from slight "backwardness" up to complete idiocy, so-called idiopathic, or otherwise.

Dr. Witmer's presentation of the subject has attracted wide-spread attention, and in this issue we give space to an article from the pen of one who has had experience in the training of such children, in which is detailed the means and methods that were employed in laying the foundation of an idiotic child's education. No one can read the article without being struck with the success that crowned the efforts of this patient teacher and without wishing to congratulate her on the result of her rational labor.

If we mistake not, such articles from practical teachers, whether they be laymen or physicians, will be read with great interest by the pediatrist and neurologist who are frequently pushed to the end of their resources to suggest the disposition of these patients. We propose to publish, at intervals, a series of such articles, written by physicians and teachers who are actively engaged in the care of mentally defective infants and children, and if in this way we may aid in securing the co-operation of the specialist in the diseases of children, the neurologist and the teacher, for the aid of these helpless members of humanity, we shall be exceedingly gratified.

It needs no mention of the fact to bring the truth of it home to the mind of every physician, that really no effort worthy of the name has been made by the profession which he represents in behalf of this most pitiable class of patients. The little that has been done has been accomplished in eeleemosynary and private institutions, without his aid, and that largely because the physician has not been in a position to make substantial suggestions. A short time ago it was thought that the services of the surgeon might be invoked to considerable advantage in the treatment of some forms of idiocy; but no one can read the published experience of those who volunteered or contributed such help without carrying away with him the conviction that if operative procedure is not completely useless in almost every form of idiocy it is very nearly so. Pedologists have learned from the physician that this is so, and now we are anxious to hear from the former if they have anything to offer that will surpass the treatment that the latter has been able to suggest.

Society Report.

NEW YORK ACADEMY OF MEDICINE.—SECTION ON PEDIATRICS.

Stated Meeting, October 8, 1896.

Congenital Stenosis of the Pulmonary Valves. — Dr. H. Koplik first presented an infant supposed to have a congenital stenosis of the pulmonary valve. On auscultation, a distinct rasping murmur was heard over the second left intercostal space at the junction with the sternum. It was not heard behind, but was conducted to the apex. The finger tips were slightly bulbous, and here only was to be observed a slight cyanosis. The child was hardly what would be called a "blue baby." The degree of cyanosis varied from time to time.

The second case was a boy of fifteen years, who, up to the age of four years, was apparently well. At that time he had had an attack of illness, apparently a gastro-enteritis, and the mother had noticed that the child was blue and its extremities cold. There are six other children in the family, all of whom are healthy. This boy was born after a normal labor, and was breast-fed. On examination, one finds cyanosis to a very marked degree; the finger tips are bulbous; the body surface is below the normal temperature; there is great dyspnea, and the cyanosis is increased by exertion. There is dilatation of the right ventricle, the area of dullness extending 2½ centimeters to the left of the sternum at a level of the fourth rib. A loud murmur is audible at the second intercostal space on the left side, and is conducted toward the apex. Its greatest intensity is over the pulmonary area. The boy suffered from frequent headaches. A simple patent foramen ovale, Dr. Koplik said, would not give the rasping murmur. The great point of interest was the congenital stenosis of the pulmonary valve, with the probability of a patent foramen ovale.

Dr. J. Lewis Smith said that in reviewing the literature of congenital deformities of the heart and blood vessels giving rise to cyanosis, he had found that out of 162 cases the pul-

Dr. C. E. Nammack's Case.

monary artery was absent, rudimentary, impervious, or partly obstructed in 97 instances. The next most common defect was a transposition of the aorta and pulmonary artery, and next to that the division of the right ventricle into the cavities.

Dr. W. P. Northrup said that three years ago there had been two young "blue babies" at the New York Foundling Asylum. There was a very loud systolic pulmonary murmur, and the fingers were "clubbed" and blue. After reference to Dr. J. L. Smith's book, a diagnosis had been made in these cases of narrowing of the pulmonary artery or orifice, with defect of the septum ventriculorum. One child, the boy, suddenly became delirious and feverish. As Dr. Smith had stated in his book that these children frequently died from abscess of the brain, this diagnosis was made. The autopsy showed a narrowing of the pulmonary artery, just at the conus, a defect of the septum ventriculorum, and an abscess of the brain. This child was over two years of age. The other child still lives, although over two years old, but in all probability the same condition is present.

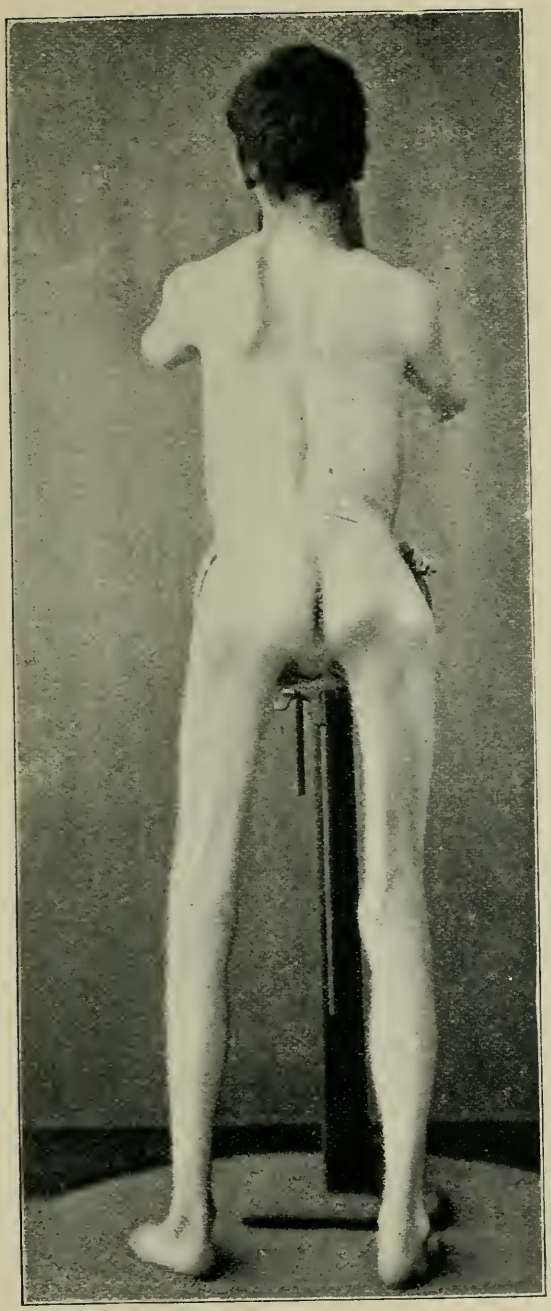
Dr. Koplik remarked that Sansom insists that one cannot differentiate during life between stenosis of the pulmonary artery and stenosis of the valvular opening.

Dr. Mary Putam Jacoby said she happened to know of one of these cases, a young man who lived to the age of twenty-six, who did not die of abscess of the brain. He lived in Spain two years, and was much improved by the warmer climate. He died of a fever common in that country.

Dr. J. L. Smith said that the character of the obstruction varied in different cases. In some extreme ones, only a cord was left to represent the pulmonary artery.

Dr. Edward D. Fisher said he could not see what possible connection there was between such a condition and abscess of the brain.

Arthritis Deformans.— Dr. William L. Stowell presented a case of arthritis deformans in a little girl of nine years. He said that children are not often affected, but quite a number of such cases had been reported. There was no history of rheumatism in the family. She was nursed for a year and a half. In 1893 she had fever and soreness of the limbs for several weeks. A month later the joints of the hands and wrists became involved. Three months after this the knees

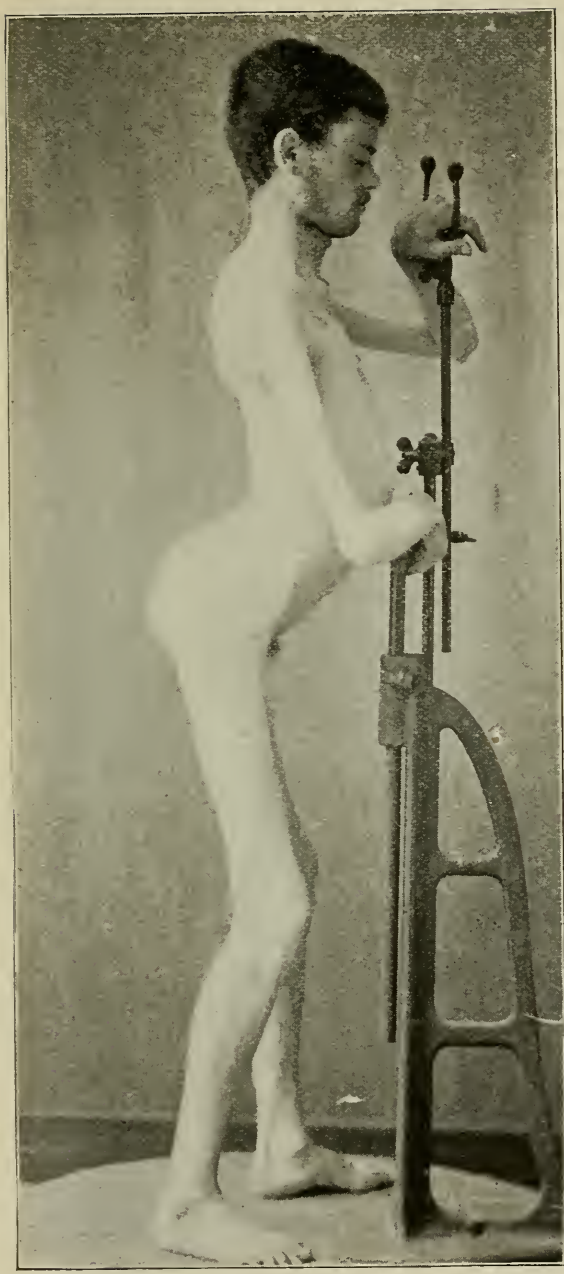


Dr. C. E. Nammack's Case.

became similarly affected. She was then in a hospital for seven months. In September, 1895, she was seen by him at the Randall's Island Hospital. At that time the head was flexed on the chest, and could not be moved upward at all; the chin almost rested on the sternum. The shoulder joints were semi-ankylosed; both elbows were enlarged and painful, and practically fixed in a semi-flexed position; the metacarpal and phalangeal bones of all the fingers were affected, the little finger the least. Both knees were greatly swollen; the legs were flexed upon the thighs at an angle of 45 degrees. The ankles were enlarged, and according to the record this had remained about the same for two years or more. The diagnosis was at once made of arthritis deformans. This child presented no evidence of disease of any of the viscera, hence, even from the outset, he had had great hope of improvement in one so young. The child was then in a most pitiable and helpless condition, being unable to play with toys, or even to sleep except in the sitting posture. At the present time she could play, and could even assist in dressing herself. There was now quite fair motion of the head—a vast improvement over what it was one year ago. For the last few months she had been making fairly successful attempts at walking. Part of the time she had been treated with iodide of potassium and wine of colchicum, and they had produced some improvement. Salicylate of soda had also been given, together with iron, cod liver oil and other tonics, but the most important part of the treatment had been the persistent use of massage. The weight of evidence seemed to be in favor of considering this disease of neuropathic origin.

Dr. Koplik said that the child had been under his treatment at the dispensary for nearly a year, but could not be properly attended to because of the absence of hospital facilities. At that time the child could not move the head or arms, and any attempt to do so caused extreme pain, and this, too, in spite of the fact that she had been given large doses of iodide of potassium and salicylate of sodium. It would seem, therefore, that the massage should be given nearly all the credit for the gratifying improvement noted.

Dr. S. H. Dessau said that there was a very similar case in the Montefiore Home, except that the latter had not improved under any treatment. The child was about six years



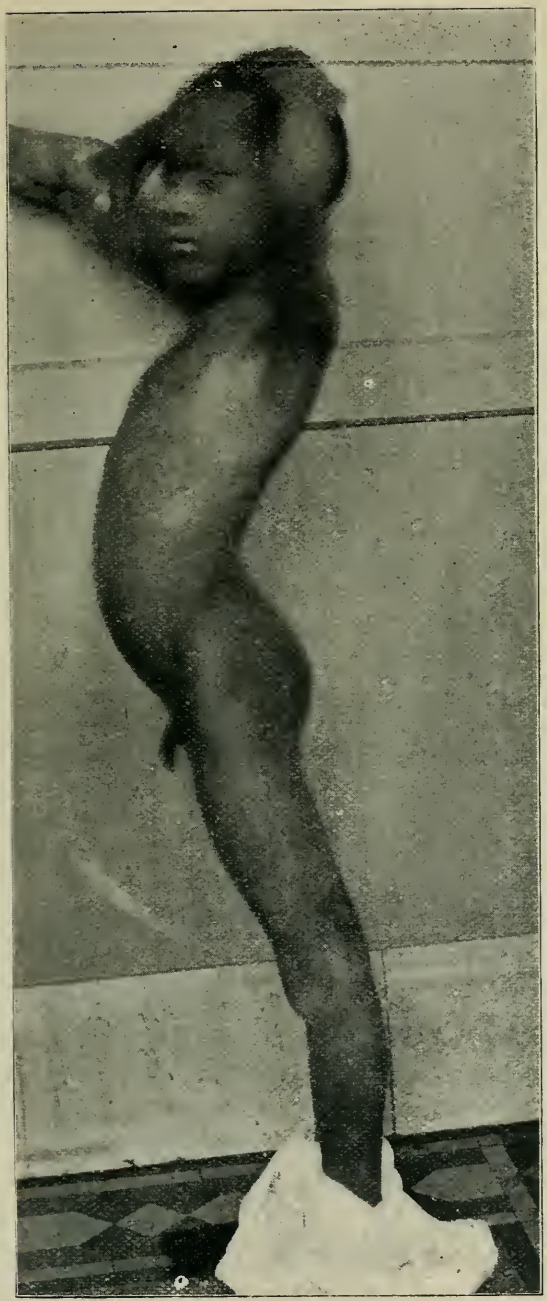
Dr. C. E. Nammack's Case.

old, and the disease had lasted about two years. Some time ago he had experimented with the bromide of gold, which had been vaunted as having much effect in these particular cases. It was used faithfully and in increasing doses for three months, but without any appreciable benefit.

Progressive Muscular Atrophy.—Dr. Stowell then presented a girl, thirteen years of age, showing progressive muscular atrophy. This had begun in the face and extended to the chest and muscles of the back. When five years of age she had had a mild attack of diphtheria. After a few months it was noticed that the face lacked its usual expression, and that the lips projected. A little later it was observed that she could not shut the eyes tightly, or closely approximate the lips. The muscles of the shoulder and back then began to waste. The muscles of the arm have wasted, but those of the forearm have remained unimpaired. The girl belongs to a large family, but all the others are healthy. The speaker said that in children, from two to ten years of age, there is usually atrophy of the face and arm. Out of 49 recorded autopsies, 39 showed lesions of the spinal cord. The treatment of this case had consisted in the administration of iron, quinine, strychnia and arsenic. The last remedy had apparently done the most good.

Progressive Muscular Dystrophy.—Dr. C. E. Nammack presented a man, twenty-six years of age, who gave no history of previous illness, but he had indulged freely in alcohol. Eight years ago he began to suffer from pain in the back, and shortly after this noticed a wasting of the muscles about the shoulder. Three years later the muscles about the hips and thighs began to waste. There had been no muscular twitchings, and no trophic disturbances. For three years prior to the development of the disease this man had been a contortionist. Locomotion is now utterly impossible, but he can maintain a sitting position.

Dr. Nammack also presented a little colored boy, who was noticed about three months ago to have a disinclination to go about. Then a weakness in the back developed, and more recently the child had been observed to frequently stumble and fall. The atrophy so far appeared chiefly in the shoulder muscles, but his neck and arms were said to have become decidedly thinner. There is an increase in the thigh muscles,



Dr. C. E. Nammack's Case.

and in those of the calves, showing that these muscles had reached the stage of fatty deposit.

Arthritic Muscular Atrophy.—A third case was presented, that of a boy of twelve years, who was said to have had an attack of rheumatism three years ago, affecting the right shoulder and side. Since then he had noticed a weakness and disability on that side. The muscles about the right shoulder were atrophied, and the infraspinatus and supraspinatus appeared to be chiefly affected, which was unusual. The case would be classified as an arthritic muscular atrophy. For the last month the mother had vigorously rubbed the affected muscles with soap liniment, and this had already caused some improvement.

Dr. Edward D. Fisher said that he had been much interested in the case of progressive muscular atrophy of the hereditary type. It was different from that form of progressive muscular atrophy of the spinal type. He could not see any family connection between the two diseases. He had observed this boy at Bellevue Hospital from time to time during the past two years. The type was typical—first the arm, with the escape of the forearm; then the thigh muscles, with the escape of the leg muscles. It would be a number of years before the muscles of the forearm and leg would exhibit the disease. The disease would probably not extend to the face. This form is called "hereditary," although in this instance there was no history of any other case of the kind in the family. It is nevertheless of that type which occurs usually in several members of a family. Sometimes there is also considerable hypertrophy. It was quite probable that the exercises that this contortionist had gone through had had something to do with the development of the disease. In the spinal type, poisoning by the metals was known to produce a typical spinal muscular atrophy. An electrical examination of either type showed that so long as there is a muscular fiber left there would be an electrical response. It was extremely rare that one would obtain in these cases the reaction of degeneration.

Dr. F. Peterson said he would not consider the colored boy a case of pseudo-hypertrophic paralysis, although there were some symptoms pointing to that condition. Examination seemed to indicate a spastic gait; the knee-jerks were exaggerated, and there was ankle clonus. This pointed to a lesion of

the pyramidal tracts somewhere in the spinal cord. Furthermore, there had been lately incontinence of urine, and some rigidity of the neck muscles. He would rather incline to the view that there was a lesion in the cervical cord, but in the hasty examination made he would not offer this as a final diagnosis. As a rule, the differentiation of atrophies and the dystrophies was not difficult. The atrophies were generally called spinal; the dystrophies were primarily muscular—in other words, a disease of the muscular fibers in which they undergo degeneration at an early period of life. The differentiation is made on four different factors or symptoms. In the spinal forms of progressive muscular atrophy there is atrophy and fibrillar tremor; no heredity, and no hypertrophy, and the reaction of degeneration is present. In the dystrophies there is atrophy, but fibrillary tremor and the reaction of degeneration are absent.

Dr. J. L. Smith said that on seeing the colored boy he had at once thought the case to be one of pseudo-hypertrophic paralysis in its incipiency.

Rachitic Muscular Atrophy.—Dr. Henry Dwight Chapin presented an infant of fifteen months, showing rachitic muscular atrophy. The child was breast-fed for four months. Dentition began at seven months. The child was apparently healthy up to six months of age, but then it was noticed to be weak and irritable. The chief points of interest in the case were the existence of muscular weakness and some atrophy of the muscles. The cranial bones gave evidence of rachitis.

Severe Recurrent Epistaxis.—Dr. Koplik presented a child, who, at the age of eighteen months, had begun to have pains in the joints, associated with fever. These attacks simulated rheumatism, and recurred every year since then. Two years ago the child began to have frequent attacks of epistaxis at irregular intervals. When seen by him, about six months ago, the child was almost exsanguinated as a result of the epistaxis. A careful examination of the nose failed to reveal anything especially abnormal. Auscultation of the heart disclosed a double mitral murmur—presystolic and systolic—with great dilatation of the left ventricle. The child, although still anemic, was rapidly gaining strength.

Enlargement of the Liver.—Dr. Thomas S. Southworth

presented a child of five years with an enlarged liver. The child had been born at full term after a normal labor, and was said to have been normal at birth except for a large belly. The child was poorly nourished for the first few months. When two years old the enlargement of the abdomen was so great that it was thought there was a sarcoma of the kidney. An exploratory laparotomy was performed, and the mother was told that there was cirrhosis of the liver. The child improved after the operation, but the abdominal enlargement continued. Previous to coming under the speaker's care there had been several attacks of unconsciousness, associated with cyanosis, which had led to treatment for epilepsy. When seen by him, about eleven months ago, the heart and lungs were negative, and the abdomen was prominent. There was no fluid in the abdominal cavity. The liver extended one inch below the umbilicus in the mammary line. The spleen was not enlarged. The urine was normal. The boy was put upon a diet of milk and rare beef, and was given bismuth freely because of the relaxed condition of the bowels. In May it was noticed that the liver was decidedly less prominent, and the general condition very much better. During the past summer there had been fever, vomiting, abdominal pain, and occasional attacks of diarrhea, with a yellowish tinge to the skin. Dr. Southworth said that in making the diagnosis, simple congenital enlargement of the liver, without minute changes, should be borne in mind, but there should be in this case no improvement under treatment. Chronic congestion would be found with chronic disease of the heart, but could be excluded in this case. Cirrhosis, in the majority of instances, affects children from seven to fourteen years of age, and in its causation alcoholism, syphilis and malaria are common factors. Syphilis and malaria could be excluded in the present instance. Fatty liver is common in children under five years of age. The course of the case in the past year would seem to bear out the diagnosis of fatty liver.

Progress in the Treatment of Cases of Cretinism.—Dr. H. Koplik presented several cretins to show the results of treatment with the thyroid extract. The first child had come under his care when twenty months old. At this time the symptoms of cretinism had been but slightly marked. The rectal temperature was 96 degrees F. It had had numerous abscesses,

which would not heal. As soon as the child was put under the thyroid treatment the abscesses healed. When presented to the academy last fall, the hemoglobin had increased from 25 to 45 per cent., and at the present time it was 75 per cent. He had noticed lately that the child had not done well on the daily doses of from one-fourth to one-half a grain of the thyroid extract. This return of the symptoms he attributed not only to the small doses of the thyroid, but to the use of a bad preparation. Accordingly, the child had been put back on the thyroid preparation of Parke, Davis & Co., in larger doses.

The second child had been brought to him when eighteen months old, at which time the hemoglobin was only 18 per cent. It had a greenish complexion, a flattened nose and the thickened lips so characteristic of cretins. At the present time the hemoglobin was 75 per cent. The other day he had noticed that the child's hands were cold, but now the circulation was better since the doses of thyroid had been increased, and the preparation changed. It seemed that the dose must be increased as the child grows older. These children should be kept upon the largest doses of thyroid they will stand without having an elevation of temperature. At the beginning of the treatment the hair of this child was coarse, dry and of a reddish color; now it is quite silky. The child is making attempts at walking and talking. Both these children had been under treatment about a year and a half.

Dr. J. P. West, of Bellaire, Ohio, exhibited photographs of a case of cretinism which had been published in May, 1895. They showed a very remarkable improvement as a result of the treatment. During the first year of treatment an attempt was made to keep the child on as large a dose of the thyroid extract as possible. It was found after trial that the child did best on one grain a day. This was kept up for several months. After nine months of treatment he had been able to give her one grain and a half of Parke, Davis & Co.'s preparation, twice a day. It was possible that the child's surroundings had something to do with her improvement, for she lived one mile and a half out of town on a high hill. During the first year of treatment she grew eight inches and a quarter, and gained fourteen pounds—*i. e.*, nearly doubled her weight. After she had been under treatment a year, the thyroid was stopped for three months, and during that time the peculiar appearance of

the cretin returned, and she became much more stupid. She was then put back on one grain and a half a day, and this was kept up until the first of this year. Since then she had had one grain and a half twice a week, on alternate weeks.

Administration of Ether to Infants.—Infants are readily brought under its influence without the slightest cyanosis. The young administrator may be puzzled at first how to estimate the degree of anesthesia produced in so young a subject. The writer has found the following method of great service: Place the index finger in the infant's hand, and it will be found that during the earlier part of the administration the finger is grasped very tightly, the palmar reflex being active; but as insensibility approaches, the infant's fingers gradually relax, and so soon as they become lissom the operation may be commenced. As in the case of adult patients our guide is the conjunctival reflex, so in the infant one should devote his constant attention to the amount of palmar and digital reflex action present. This method is preferable to the conjunctival test, because the conjunctiva of a baby loses its sensitiveness very quickly after being touched a few times with the finger. The infant may appear to be thoroughly insensible by the conjunctival test when it is actually on the point of recovering from the anesthetic, and under such conditions the reapplication of the face piece will cause struggling, to the great inconvenience of the operator. The writer has never seen bronchitis due to the administration of ether produced in a baby, but he is exceedingly careful to guard against cold air being breathed for several hours after the operation. The opening of a window is strictly forbidden, and when possible the baby is not even removed from the room in which the operation has been performed for at least six hours, and he finds that when these directions are strictly adhered to there is no danger of bronchitis occurring; moreover, the tendency (if any) to sickness is greatly diminished, and this he attributes to the non-stimulation by cold air of the nerves supplying the lungs with the consequent reflex action on the stomach.—F. Woodhouse Braine in the *Practitioner*.

Abstracts.

ETIOLOGY AND DIAGNOSIS OF EPIDEMIC CEREBRO-SPINAL MENINGITIS.

O. Heubner (*Deutsche Medic. Wochenschr., 1896, xxii, 423*). The relation of the pneumococcus to cerebro-spinal meningitis, as a cause, is not satisfactory. Weichselbaum in 1887, and later Jaeger of Stuttgart, demonstrated in epidemic meningitis another micro-organism, which he found in the meningeal exudate, whose individuality is positive. Its characteristic is that it appears in the form of a diplococcus, frequently as a tetracoccus, and is usually found *within the pus cells.* These physicians demonstrated this meningococcus intercellularis in the bodies of those dying of cerebro-spinal meningitis. The author believes that he was the first one able to demonstrate this microbe in the living subject. His first case occurred in the spring of 1895, in a girl one and a half years of age, in whom a diagnosis of cerebro-spinal meningitis had previously been made. Since then, six more cases occurred in his clinic, and Dr. Finkelstine added two more from other clinics. In all the cases which died, the autopsy confirmed the diagnosis. In these cases, spinal puncture, according to Quincke, yielded a turbid, sometimes even a purulent fluid, which contained pus corpuscles in great number. Within these there was always discovered the diplococcus or tetracoccus, and in such numbers and arrangement as to remind one strongly of the behavior of the gonococcus. It seemed important to discover whether this new microbe would also produce inflammatory conditions in animals. This was done in the following manner: The needle of a hypodermic syringe, after shaving and disinfecting the skin of the animal, was plunged between two spinal processes in the lumbar region, and when a few drops of clear fluid oozed out through the needle the infected liquid is then injected into the dural sac. The first experiments were negative, although pure cultures from Jaeger, from the author's own cases, and fluid taken directly from the spinal canal of a patient was used.

It was then supposed that the animals used in the experiment were immune to this poison and others were taken. In

a young dog the experiment was still questionable, but in two goats an undoubted positive result was obtained. One of these goats, previously perfectly healthy, was injected with a bouillon culture of Jaeger's germs. She soon became quite feverish, and died in one and a half days. Autopsy disclosed a hemorrhagic spinal meningitis, and from all the diseased portions proof of the presence of the meningococci was obtained. The second animal was inoculated twice with a watery culture from one of the first cases, with the result that it sickened, but soon recovered from the fever, and rapidly emaciated. Lastly, the liquid exudate from the fifth case was directly injected into the animal; soon after it became ill and died within a day. At the autopsy a meningitis, extending the entire length of the spinal cord, was found, with hydrocephalus acutus. In the hydrocephalic fluid were found pus cells containing the tetracocci. These experiments seem to prove that the virulence of the meningococci is not as great as that of the pneumococci. The injection of some pleural exudate containing pneumococci into the spinal sac of a rabbit rapidly caused the death of the animal, while the fluid containing the meningococci had no ill effect on it before. This lower virulency of the meningococcus explains some clinical and epidemiological facts. A meningitis produced by the pneumococci is seldom recovered from, and frequently produces death in a few days. In epidemic cerebro-spinal meningitis, about one-half or one-third die, and the duration of the disease often stretches over weeks or even months. Should it be still further proven that the meningococcus intracellularis stands in etiological relation to epidemic meningitis, we would be able by lumbar puncture to differentiate the sporadic cases of cerebro-spinal meningitis from epidemic meningitis.

ON THE CARE OF PREMATURELY BORN INFANTS.

A. Schmidt (*Jahrb für Kinderheilkunde, 1896, xlii, 301*) says that the proper feeding of prematurely born infants is certainly a very important question; but, even more so is the temperature in which such a child is kept. It is not sufficient to clothe them warmly, pack them in cotton and place warm bottles about and around them, but it is equally important, in washing and dressing them, in carrying them from one room to another, in the opening of windows and doors, to be

exceedingly circumspect that they never be subjected to draughts or to sudden changes of temperature. It is not absolutely necessary to use an incubator. The same object may be attained without the use of this complicated apparatus, if the child, after being warmly dressed and surrounded with cotton and warm bottles, be placed in front of a hot stove. By weighing the child daily, it was demonstrated that hardly anything had such an influence on the steady increase of bodily weight as an even, high temperature. The temperature of the room should at first be kept, day and night, at 72½° to 75° F., and the very slightest deviation from this rule would have a bad effect on the weight of the child. Even a slight fall in temperature, or the washing and dressing of the infant too slowly, or too far away from the heat of the oven, would invariably produce dangerous symptoms of collapse. The use of two rooms, one of which could be ventilated and again heated before the infant is brought back into it, would be advisable. Prematurely born children should not be bathed at all during the first two months of their existence. They should be quickly washed with warm water, once a day, and only one part of the body at a time should be exposed. The tender skin must be carefully washed and dried with cotton batting, and a powder of talcum and zinc oxide thoroughly dusted on the parts most prone to become excoriated. Abrasions must be touched with a little brandy before powdering. These children are to be taken out into the air only with the greatest caution. It was found that a child, who had gained half a pound every week, showed great disturbance in its progress from the day it was taken out into the warm sunshine and perfectly still air of the garden. There was absolutely no other reason for the sudden and enormous retardation of its increase in weight. In some cases, however, it may be beneficial to give them an airing after a few weeks, but it should only be done during the hottest days of summer, when there is a total absence of wind. Never should these children be taken out of their pillows, or laid on the ground. Their clothing should be the same as other babies, but should be thoroughly warmed before the fire until perfectly dry, then wrapped around a hot warming bottle and transferred directly on to the child's body. It is absolutely necessary that a little woolen shirt with sleeves should be slipped over the muslin one. Should the child vomit dur-

ing sleep every other material will become soaked and wet, wool not taking up water so readily allows the greater part of the fluid to run off and the skin of the child remains dry and warm. Very frequently children are protected only by one muslin diaper, without an additional flannel one over it. These children after urinating suffer from a cold and wet abdomen, and severe colds and disturbances of nutrition may result from this. A flannel diaper should always cover the cotton one. It should be of square shape during the first eight weeks, and fastened around the body and thighs from the outside, not like the triangular cloth passed between the thighs, because the presence of such a quantity of material is apt to press the thighs apart and produce sabre legs. After eight weeks a triangular flannel may be used to cover the cotton diaper.

It may be advisable at about the seventh to the ninth month, when the child by its lively movements continually displaces the diaper, to give it two pairs of small trousers, the outer being made of flannel.

Prematurely born children usually sleep day and night if they progress favorably, therefore it is necessary from the first to carry them about the room, warmly packed up, for ten minutes three to four times a day. While they are lying in bed, their position should be changed every two hours to prevent hypostatic congestion of the lungs.

A CASE OF ANTITOXIN POISONING.

L. Rosenberg (*Med. Rec., 1896, I. 460*) reports the case of a girl, aged four, who was taken sick on Sunday, July 5, with sore throat and a rise of temperature to 101.5° F., per rectum. On the 6th, the appearance of a small membrane on each tonsil warranted a clinical diagnosis of diphtheria (subsequently verified by culture), and she was given one injection of two thousand units of antitoxin. This was at about 1:30 P.M. She slumbered quietly for about an hour when the mother (an unusually observant and intelligent woman) noted that the child appeared to become cyanosed. She awoke, complaining of cold, and was taken with a severe, prolonged chill; lapsed into unconsciousness and collapse. The child was *in extremis*. The temperature per rectum was 109° F. He gave the child one one-hundredth grain of strychnine hypodermatically, and two minims of digitalis fluid extract in

ether. The pulse was scarcely perceptible. The patient was rigid, icily cold; the pupils were dilated to their utmost; a profuse perspiration appeared all over the body; a large quantity of coal-black feces was involuntarily expelled, resembling meconium, but of darker hue and staining everything with which it came in contact. Nitroglycerin, one-fiftieth grain, was injected under the skin. It was found necessary to repeat this in twenty minutes. The pulse rallied nicely from this, but the condition was extremely menacing. There was more or less rigidity, notably of the muscles of the neck; there was partial opisthotonos; the surface temperature continued frigid and the skin clammy. Hot-water bottles were placed all about the child. Four ounces of strong coffee, with two ounces of cognac, were thrown into the rectum, hot, and were retained. This was repeated in an hour. The nitroglycerin had to be exhibited freely and frequently, the heart action being extremely feeble and irregular. In all, the patient received one-eighth grain between 3 and 8:30 P.M., when she began to rally. Although still unconscious, her pulse was slower, full, and regular; the normal bodily temperature obtained, the pupils were less widely dilated, the temperature was 103° F. per rectum. Nourishment could not be given; an enema of whiskey, milk, and egg was not retained.

This condition continued as described until midnight, when she came out of the stupor. Attempts were then made to nourish her with small doses of champagne and an infant food, but the stomach rejected everything. The vomit was fluid and inodorous, but contained the same dark coloring matter as the stool before described. The rigidity gave way to extreme restlessness, the patient writhing about in the bed, with very short intervals, during which opisthotonos would recur. Ten grains of sodium bromide were given per rectum, without benefit. The extreme nervous perturbation continued.

At 11 A.M., Tuesday, the temperature was 101° F.; the stomach was still rebellious. The child was fully conscious, but complained of nothing; the restlessness was unabated. A second rectal injection was given, containing ten grains each of sodium bromide and chloral hydrate, and two drachms of whiskey. The stomach was quieted by one-twelfth grain of morphine, given hypodermatically. From now on the condition became more tranquil, the child slumbering, though fit-

fully. The stomach retained small doses of fluid nourishment; the temperature fluctuated between 101° and 102° F. during the day.

Wednesday morning the temperature, pulse, and general condition were as nearly normal as could be expected under the circumstances. The membrane had entirely disappeared. The first urine obtained (twenty hours after the onset of the collapse) was foul smelling and strongly alkaline, but free from albumin or blood. The subsequent history was uneventful, and the child is as well as ever. The small quantity of iron which the child received before the antitoxin was resorted to was insufficient to give the stool the deep black color it presented. The dark color of the vomit is also unexplainable. The condition of the digestive tract had been normal prior to the illness. Elsie, an older sister, had been given three hundred units of antitoxin from the same source, without any untoward symptoms developing. The injections were made by one of the most experienced physicians on the staff of the health board.

CEREBRAL HEMORRHAGE A COMPLICATION OF WHOOPING-COUGH.

Oppenheim (*Deutsche Medic. Wochenschr., 1896, xxii, 269*) says that this complication, which is one of the most unusual, has been observed by him in one case. On July 12, 1895, in the evening, the 8-year old patient, who was suffering from whooping-cough, was thrown into a very peculiar condition. He lost consciousness, threw himself continuously about in his bed, and emitted unintelligible sounds. Fever was absent and reflexes of the pupils and tendons were normal. As the patient had vomited once and no movement of the bowels had taken place in two days, he was given an enema and some calomel powders, but without the desired effect. During the night the restless agitation gradually changed to a deep somnolence. Then there occurred slight twitchings, first in the area of the right facial muscle. These twitchings became more severe during the following day and gradually extended over the right half of the body. The convulsions occurred periodically and were nearly always terminated by a paroxysm of whooping-cough. At the height of the disorder, in the afternoon of this day, the paroxysms occurred every 5 to 10 min-

utes, in spite of rectal injections of the bromides. During the next night a temperature of 39.2° C., and a pulse of 120 were observed at one time, most likely due to the severe agitation of the muscles; at other times the pulse was 80 and the temperature normal. From the third day the frequency and intensity of the paroxysms gradually diminished, and during the intervals of rest a total paralysis of the right extremities was demonstrated, and an absence of the tendon reflexes of this side. On the eighth day the sensorium began to clear up somewhat; the patient frequently asked for a drink, but did not seem able at times to find the correct words. On the tenth day speech became normal, and gradually the functions of the leg and of the arm returned. The tendon reflexes also became normal and the twitchings ceased, but the whooping-cough remained. At the end of the third week the patient was able to be about and was apparently well. This case was undoubtedly one of hemorrhage into the right cerebral hemisphere, caused by a rupture of a vessel during a paroxysm of whooping-cough. The boy had been taught by his father to close both mouth and nostrils and blow up the cheeks when an attack commenced, and very likely the high tension of the blood pressure gave rise to the rupture.

A FATAL CASE OF PETROLEUM POISONING IN A GIRL TWO YEARS OF AGE.

A. Johannessen (*Berlin clin. Wochenschr., 1896, xxxiii, 318*) reports that on December 8, 1895, at 6 P.M., a two-year-old girl, who had swallowed an unknown quantity of American petroleum, was brought to the clinic. The girl, who came from a tuberculous family, was said to have frequently suffered since she was two months of age from attacks of diarrhea of variable duration, and never to have been free of it for longer than one month at a time. The last attack occurred three weeks ago and lasted eight days. Vomiting was seldom present. Patient was always delicate.

Present state: Patient is pale, lips somewhat cyanotic, respiration slightly labored (56), heart sounds clear and distinct, temperature 37.5 C. The patient is stupid, but not comatose; the pupils are not dilated and react well to light; the pulse is 144 and somewhat irregular; a rhachitic rosary and some thickening of the epiphyses are present. The expired

air has the odor of petroleum. Copious vomiting was induced by passing the finger down her throat. The vomited material contained much mucus, a little blood, and had a strong odor of petroleum. The stomach was washed out. The return fluid smelled strongly of petroleum. After half an hour the finger was again introduced into the throat, but it caused but little vomiting. A subcutaneous injection of one gramme of oil of camphor was made. The pulse improved and the patient rallied somewhat. The bowels were moved by two enemata; the discharges smelled strongly of petroleum. At 7:30 P.M., with a temperature of 37.4° C., renewed somnolence appeared, the respiratory difficulty increased, the pulse became smaller and irregular, and the patient died, comatose, at 9 P.M.

The autopsy did not reveal any pathologic-anatomical changes to explain the death. The heart was dilated, but not fatty; neither were the kidneys nor intestines degenerated. Marked atelectasis and congestion of the lungs were present, but no pneumonic infiltration. The negative result of the autopsy, as well as the symptomatology, seemed to point with certainty to an intoxication of the cerebro-spinal system primarily, as we meet with in quite a number of other poisons, as well as in poisoning by the carbo-hydrate series, and their derivatives, of which the American petroleum is composed, and to which such poisons as fire-damp, ether and alcohol belong. The action of these compounds depends, in all probability, in influencing particular ganglia. Kobert also places petroleum among the cerebro-spinal poisons. The foregoing case is the first authenticated one where death has been caused by the ingestion of petroleum. What caused death is difficult to determine; animals which have been poisoned by petroleum presented the same congested condition of the lungs as was found in the case just described.

A CONTRIBUTION TO THE CASUISTRY OF OPIUM POISONING.

ESCHLE (*Therap. Monatshefte, 1896, x, 236*) was called, December 20, 1895, about 7 P.M., to the patient, a girl four years of age. The child was found in a condition of stupor, which was periodically interrupted by opisthotonos, trismus and intermitting convulsions. Severe expressions of pain

were easily induced by a light contact with the skin. Both pupils were dilated nearly to their maximum extent and did not respond to light. The face was suffused, the skin hot and dry and the pulse small and retarded. Her condition had been noticed in the forenoon, but became more marked toward evening. Frequent vomiting of bile occurred, but no movement from the bowels.

Etiology: The patient had been in bed since the preceding day, and during the night, towards 11 o'clock, she became so restless, after having coughed a great deal, that her mother administered twelve drops of some medicine which a physician had ordered in a previous attack of the same kind. The medicine consisted of pure tincture of opium, as was discovered later by questioning the apothecary. The child was given a luke-warm bath, poultices were applied to the abdomen, and ice pellets given internally. At 9 o'clock the patient went into deep coma; there were no convulsions; the face became pale, the skin moist, the respiration shallow and slowed (10 to 12), the breathing quiet, the pulse small, irregular, arhythmic (58–66) and the temperature in the axilla was 38.4° C. The child was given an enema of soap and water, and infusion of belladonna with syrup of senna. During the night vomiting occurred several times, but no stools. The medicine could only be given very irregularly on account of the stupor. At the next visit, on the following day, the mother reported that the pupils had been markedly contracted, and added that the patient had been unable to empty her bladder.

Present state: Deep stupor, no convulsions, troublesome cough, pupils of medium size and react to light, skin dry and not cool, pulse fairly strong (82), respiration 16 to 18 a minute, temperature 40.2° C. Dullness detected at the posterior lower aspect of the right lung, with diminished and rough breath sound. The symptoms of intoxication improved very slowly during the next two days, while the fever, cough and other pneumonic symptoms persisted until the occurrence of the crisis, in the night of December 26–27. Convalescence proceeded uninterruptedly and the child was dismissed on January 2, 1896.

Remarkable in this case of opium poisoning was first the long duration of the symptoms, and the dilatation of the pupils at the height of the symptoms. Eschle makes the following points:

(a) The center for the dilatation of the pupils may be directly excited by the venous blood which circulates in it. Accordingly, when respiration is defective, or during an attack of dyspnea, a considerable dilatation of the pupils may be induced, while, on deeper asphyxia, a paralysis of the center takes place and the dilatation disappears. In this case, the hyperemia of the lungs may have been the cause of the dilatation.

(b) A few dilating fibers are present in the fifth nerve, but most of them take their course down the spinal-cord to the cilio-spinal region, in the lower portion of the neck, and the upper portion of the posterior part of the spinal cord. From here in the ape, and probably, also, in man, they pass by way of the second spinal nerve into the neck portion of the sympathetic, from which they again ascend to the eye. The irritation of the sympathetic may have been induced by the excitation of the gastro-intestinal tract (vomiting). On the other hand, opium, in very large doses, produces an irritation of the spinal column, although at first, and in small doses it acts on it as a sedative. Very noticeable was the great increase of reflex irritability in this case, which rather simulated a poisoning by strychnine; lastly the concurrence of a pneumonia is rather remarkable. It is quite likely that the symptoms which induced the administration of the opium were already these of the beginning pneumonia, though the opium intoxication might have produced a marked hyperemia of the lungs favorable to the carriers of infection which produced the catarrh of the air-passages. Lastly, the surprising fact may be mentioned that a physician should have ordered twelve drops of pure tincture of opium to be given a four-year-old child *pro re nata*. The doctor had been consulted by the mother for cramps, from which "her girl" suffered, and not having seen the patient nor instituted strict inquiries, ordered the opium, believing the patient to be a domestic and suffering from "menstrual colic."

EXTIRPATION OF THE UTERUS AND VAGINA IN A CHILD NINE MONTHS OF AGE.

Hollander (*Deutsche Medic. Wochenschr., Vereins Beilage, 1896, xxii, 16*) demonstrated, in the Freien Vereinigung der Chirurgen, the specimen of a total extirpation of the uterus and vagina obtained by Prof. Israel from the following case: The

patient was a child from a healthy family, who suffered at the early age of seven months from profuse hemorrhages of the vagina. The physician removed a partly decomposed vaginal polypus of the size of a pigeon's egg. A microscopic examination proved it to be a sarcoma. Prof. Israel was engaged to do a radical operation. The vaginal exploration revealed an irregular, rather firm tumor of the size of an almond, which filled the posterior portion of the vagina, obstructing the passage to the vaginal portion of the uterus and forming a mass with the uterus itself. Under chloroform narcosis, the field of operation was exposed by an incision reaching from the posterior superior spine of the ilium to the tip of the coccyx, carefully avoiding the nerves and pudendal artery. The greatest difficulty experienced, owing to the minute proportions of the parts, was the liberating of the vagina from its surrounding connections. A small peritoneal tear was made use of to draw the retroverted uterus out of Douglas' cul de sac, to free it from its adnexa and to remove from the wound in this way the whole internal genitals *in toto*, without bringing the sarcoma in contact with any of the surrounding parts. The vagina was then cut off about 1 cm. above the vestibule and the wound sewed up. In four weeks the patient was discharged cured.

Description of the Preparation: A tumor, somewhat lobulated, irregular and firm, about 2½ cm. broad and long. The tumor, which is sessile and involves the whole thickness of the wall, is a spindle and round-celled sarcoma. The surrounding mucous membrane has a slightly granular appearance in two spots, and there are present a few cock's comb like excrescences on the opposite and anterior side. These fine warty growths mark the commencing grape-like character of the neoplasm. This grape-like sarcoma of the vagina differs both pathologically and clinically from the primary vaginal sarcoma of the adult. All the 15 cases previously reported of congenital sarcoma of the vagina were fatal, no radical operation having been attempted in any of them. Recurrence was the rule within a few weeks, sometimes within a few days, where the operation only aimed at the removal of the polypoid masses. In only one case, that of Schuchardt, an operative success was obtained. This was a tumor springing from the lower part of the posterior vaginal wall, which was removed along with the portion on which it rested, by Volkman. After 6½

months it recurred, when one-half of the posterior vaginal wall was removed, with the result that the child was cured, and now, after ten years, is a robust and perfectly healthy girl.

CARIES OF THE SPINE.

H. Schramm (*Wiener Medic. Wochenschr., 1896, xlvi, 958*) reports 110 cases treated by himself; in 10 cases the affection was situated in the vertebra of the cervical region, in 66 in the dorsal, in 21 in the lumbar, and in 3 in the sacral; in 10 cases the situation is not mentioned. In regard to the etiology some traumatism is to be accepted as one of the most important causes, because the tubercle bacilli have a tendency to infest slightly injured bones or joints. The reason why caries of the spine is most frequently met in children under four years is that during this period they are most prone to injury, either by falling or being carried in a slovenly manner. Heredity is also a great factor in caries of the spine. In 25 cases the disease was developed as a sequel to other maladies; in 12 cases it followed whooping-cough, in 8 measles, in 5 some other febrile disorder. Of course these diseases only predisposed the system to the reception of the tuberculous virus. In the majority of cases there was present at their reception a pronounced kyphosis, only in one case was this absent. A boy, 6 years of age, who came to be treated for a cold abscess, situated above the right Poupart's ligament, and in whom the abscess was said to have developed in three months without any great discomfort. After the abscess had been opened by a broad incision, it was found that the origin of the suppuration was in the first lumbar vertebra, whose anterior surface, as far as the finger could reach, was roughened. Notwithstanding the best after-treatment, the child became gradually worse, and left the hospital incurable. The case proved to be one of *spondylitis superficialis*. Hoffa claims that these forms are due to actinomycosis. Microscopical examination did not warrant this diagnosis, but on infecting a rabbit with some of the pus, the latter died of acute miliary tuberculosis, hence the case was undoubtedly one of tuberculosis. As to the frequency of abscess formation in disease of the different vertebra, there was suppuration present in 40 per cent. of the cases of caries of the cervical, in 36.4 per cent. in that of the dorsal, in 70 per cent. of the lumbar, and in the three cases of the sacral region. It is

not to be inferred from this, however, that tuberculosis of the dorsal region has a lesser tendency to the formation of abscesses. The course pursued by the abscesses was various; those originating in the cervical region presented in two cases as retropharyngeal abscesses. In one case it descended along the deep fascia of the neck to the *fossa supraclavicularis*, and in another case of caries of the second and third cervical vertebra it made its way backwards and appeared close to the spinous process of the diseased vertebra. In 68 per cent. of the cases of disease of the dorsal vertebra, the suppuration extended along the anterior surface of the vertebra, and in one case the abscess which had reached the posterior mediastinum, burst into the pleural cavities, and, producing an acute pleurisy, caused death. In other cases the pus traveled further downward and appeared above or below Poupart's ligament or invaded the intermuscular spaces of the thigh, presenting a fluctuating tumor at the anterior, internal, or posterior surface of the thigh.

A second complication of spinal caries is the so-called compression-myelitis. According to later researches this is not caused by the kyphosis as such. Very rarely also do the abscesses exert a direct pressure on the spinal cord. The symptoms are produced by a serous infiltration of the meninges and of the spinal cord itself.

The prognosis in caries of the spine is bad, particularly as we never can be certain in what stage the disease may be checked. As a general rule the prognosis may be influenced by:

(1.) Heredity. In children whose parents have been tuberculous or luetic, the affection is exceedingly grave.

(2.) The general condition of the patient's health. If the vertebræ only are the seat of disease, and the organism is otherwise healthy, the prognosis may be better.

Treatment: Fresh air continually supplied to the patient is of immense value. Locally the gypsum bed, as described by Lorenz and Hoffa, was used. The child was laid on a flat table and thick bolsters were placed under the forehead and pelvis, which position curved the spine slightly forward. Then the whole back was covered with gypsum bandages, from the back of the head to the gluteal folds, carefully pressed into all folds, particularly at the neck and the pelvis. After having applied

ten to fifteen layers of the bandages, the whole was strengthened by thick layers of wood shavings, soaked in a mixture of gypsum and water. Lastly, it was well padded, and the child was laid in it and fastened there with broad bandages. In a number of cases he made use of extension of the spinal column by fastening a weight of three to six kilogrammes onto Glisson's loop, attached to the head of the patient, and laying the child on a hard mattress at such an angle that the weight of the body produced counter-extension.

Where abscesses were formed, different procedures were adopted; some were incised and others were aspirated and washed out with a solution of boric acid, then injected with 30 to 50 grm. of a iodoform-glycerin emulsion (1:15). The conclusion was, however, reached to let the abscess alone if possible, and by dietetic and climatic treating to counteract the original disease.

During late years it has been recommended to resect the diseased parts and thoroughly scrape out the disease. He resorted to this treatment in five cases, but can only recommend the operation where it is possible to approach the diseased part without having to resect much healthy bone, or where the suppuration is due to a remaining sequestrum.

Chorea.—Dr. E. De Renzi (*Gazetta degli Ospitali e delle Cliniche*, 1896, No. 29), has made use of eserine, antipyrin, salol, and ether spray along the vertebral column, but he places his confidence in only three remedies: (1) Absolute rest, the patient being placed in a dark room and avoiding all external excitation whatever. (2) The ascending electrical current along the spinal cord—the best result with a gentle current progressively increased. (3) Arsenic in large doses, commencing with twenty drops of Fowler's solution each day for children and double this amount for adults. The medicine should be continued after the chorea ceases, for the disease readily returns. The nutrition of the patient must be maintained and good food and gymnastics are useful.—*Med. Record.*

PEDIATRICS

Published SEMI-MONTHLY with Illustrations.

8s. a year.

All Communications should be addressed to PEDIATRICS, 45, St. Martin's Lane, London, or 1432, Broadway, New York.

Manuscripts received only on condition that they are contributed *exclusively* to this journal. Rejected manuscript will be returned.

Compensation to Contributors.—Illustrations will be provided without cost to the author, and 300 reprints or 100 copies of PEDIATRICS containing the article will be furnished. Extra reprints will be supplied *at cost* if the order accompanies the manuscript.

Subscription price, 8s. a year. Subscriptions may begin at any date. Subscribers failing to receive PEDIATRICS will confer a favour by sending a postal card to the London office, and the omission will be supplied.

How to Remit.—The safest mode is by Bank Check, Draft, Postal Order or Money Order, payable to the order of PEDIATRICS. Cash must be sent in Registered Letter.

Receipts.—The receipt of all money is immediately acknowledged.

Copyright.—The entire contents of PEDIATRICS are covered by general copyright in the United States and Great Britain, but editors are welcome to use any article, provided credit is given.

Contracts.—No contract involving the expenditure of money or any departure from the approved regulations adopted for the business of PEDIATRICS is valid unless signed by the owner.

Views of Contributors.—The Editors and Publishers are not responsible for the views of contributors.

TAKA-DIASTASE

Acts more vigorously on starch than does Pepsin on proteids.

RELIEVES

AMYLACEOUS DYSPEPSIA.

"We are now able to relieve a large number of persons suffering from faulty digestion of starch, and can aid our patients during convalescence, so that they speedily regain their weight and strength by the ingestion of large quantities of the heretofore indigestible, but nevertheless very necessary, starchy foods. We trust that the readers of the GAZETTE will at once give this interesting ferment a thorough trial, administering it in the dose of from 1 to 5 grains."—THE THERAPEUTIC GAZETTE.

TAKA-DIASTASE is PROVIDED in POWDER or in COMPRESSED TABLETS of 2½ grains.

Pepsin is of no Value In ailments arising from **Faulty Digestion of Starch.**

SAMPLES AND LITERATURE ON APPLICATION.

Please mention PEDIATRICS.

PARKE, DAVIS & CO.,

MANUFACTURING CHEMISTS,

21, NORTH AUDLEY STREET, GROSVENOR SQUARE, LONDON, W.

Antique Furniture

Examples of Genuine Sheraton Chippendale and Queen Anne Furniture

Some very fine Specimens of WARDROBES, DRESSING TABLES, WASHSTANDS, Chests of Drawers, &c., at moderate prices.
Complete sets of Chippendale Chairs. Side Boards and Side Tables in the "Adams" style.
A Quantity of Antique Carpets and Rugs

Specialities in Curtain Fabrics

THAT CANNOT BE OBTAINED ELSEWHERE

The Largest Show Rooms in London for the display of Furniture in good taste at moderate prices

Our NEW ILLUSTRATED CATALOGUE is just issued; containing upwards of 2,000 Designs with Estimates for Furnishing. Free on application

Druce and Company

Baker Street ⚜ London, W.

Harrison & Sons, Printers in Ordinary to Her Majesty, St. Martin's Lane, London.